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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,509	09/08/2003	Kazuaki Nakamura	KON-1818	9322
20311	7590	12/16/2004	EXAMINER	
MUSERLIAN, LUCAS AND MERCANTI, LLP 475 PARK AVENUE SOUTH 15TH FLOOR NEW YORK, NY 10016			CHEA, THORL	
			ART UNIT	PAPER NUMBER
			1752	

DATE MAILED: 12/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/657,509

Applicant(s)

NAKAMURA ET AL.

Examiner

Thorl Chea

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 02242004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 1-10, 13 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Oya et al (US 2001/0051319).

See Oya pages 52-53 claim 1 discloses a photothermographic material comprising at least (a) a photosensitive silver halide, (b) a reducible silver salt, (c) a reducing agent represented by the following formula (1), (d) a binder, and (e) a phenol compound represented by the following formula (2) on the same side of a support:

13 wherein, in the formula (1), V^{sup.1} to V^{sup.8} each independently represent hydrogen atom or a substituent, L represents a bridging group consisting of --CH(V⁹)-- or --S--, and V⁹ represents hydrogen atom or a substituent; and wherein, in the formula (2), R¹ and R² each independently represent hydrogen atom or a substituent, X¹ to X³ each independently represent hydrogen atom or a substituent, provided that the substituents

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represented by X^1 to X^3 do not represent hydroxy group, and when the substituents represented by X^1 to X^3 are bonded to the phenol ring via nitrogen atoms, X^1 to X^3 represent a nitrogen-containing heterocyclic group or a group represented as $--NH--C(.dbd.O)--R^{sup.4}$ where $R^{sup.4}$ represents a substituent having 8-40 carbon atoms, or the substituents represented by R^1 , R^2 and X^1 to X^3 may be bound to each other to form a ring. It is also on page 3, column 1, [0027] disclosed that V^9 is a cyclic alkyl; page 3, column 2, [0028] that V^9 is a heterocyclic group having 2-20 carbon atom, an aryl group, for example phenyl, p-methylphenyl, naphthyl; page 8, compound (II-4), (II-6) having formula within the scope of formula (2) of the claimed invention. The scope of R_{11} and R_{12} encompasses the scope of the V^9 of Oya et al, and the scope of the formula (2) is within the scope of the compound (II-4) and (II-6). Therefore, the invention as claimed lacks novelty. Alternatively, it would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use any substituents associated with the phenol compound and the compound of formula (2) taught in Oya et al with a reasonable expectation of highly useful material with high sensitivity, high image density, and low fog.

4. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Fukui et al (US 2002/0102502) and Patent Specification 1543266 (PS'266).

See the material discloses on pages 38-41, claims 1-20, especially the compound of formula (I), (II) in claim 1, the compound of formula 9III) in claim 11; the molar ratio of compound of formula (I) to formula (II) of 0.001 to 0.2. See also the generic formula (III, and the its exemplified compound on page 6-10. The compound of formula (1) of Fukui

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contains L as $-\text{CHR}^{13}-$ wherein R^{13} is an hydrogen or an alkyl group having 1-15 carbon atoms. See page 3, column 1. Fukui et al fails to specifically disclose whether R11 and R12 are each a hydrogen atom, membered non-aromatic ring group or a 5- or 6-membered aromatic ring group, provided that R11 and R12 are not hydrogen atoms at the same time claimed in the present invention. However, the groups as claimed have been known as an equivalent to the alkyl group of Fukui and discloses in PS'226 on page 15, lines 10-15 which discloses the alkyl, aryl, and phenyl group as substituent for the phenol compound useful in heat-developable material. It would have been obvious to the worker of ordinary skill in the art at the time the invention was made to associate a group known as equivalent to the alkyl group taught in PS'226 such as the aryl group or phenyl group with the phenol compound taught in Fukui et al with a reasonable expectation of achieving a highly useful photothermographic material that give an image with good tone, and thereby provide a material as claimed.

5. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over either EP 1327909 (EP'909) or EP 1278101 (EP'101) in view of Fukui et al (US 2002/0102502).

EP'909 and EP'101 each discloses a photothermographic material containing the phenol compound having formula within the scope of the formula (1) of the claimed invention. See EP'101 on page 79-80, formula (S), (T) claims 1-2, and EP'909 on page 86-87, formula (A-2) and formula (A-3). Both EP'909 and EP'101 fails to disclose the compound of formula (2) of the claimed invention, which is however, known in Fukui et al to use the compound within the scope of formula (2) to provide a photothermographic material close to pure black tone. See page 1 [0010]; and page 38-41, claims 1-20.,

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compound of formula (II), and formula (III). It would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use the compound of formula (II) or (III) taught in Fukui et al to provide the material of either EP'909 or EP'101 to close to pure black tone, and thereby provide a material as claimed.

Double Patenting

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1-14 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-4 of copending Application No. 10/336,920 in view of Fukui et al (US 2002/0102502).

This is a provisional obviousness-type double patenting rejection.

Fukui et al disclose the use of the compound within the scope of formula (2) to provide the tone of photothermographic material close to pure black tone. See page 1 [0010]; and page 38-41, claims 1-20., compound of formula (II), and formula (III). It would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use the compound of formula (II) or (III) taught in Fukui et al to provide the material

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claimed in the copending application to close to pure black tone, and thereby provide a material as claimed.

8. Claims 1-14 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-4 of copending Application No. 10/631,910 in view of Fukui et al (US 2002/0102502).

This is a provisional obviousness-type double patenting rejection.

Fukui et al disclose the use of the compound within the scope of formula (2) to provide the tone of photothermographic material close to pure black tone. See page 1 [0010]; and page 38-41, claims 1-20., compound of formula (II), and formula (III). It would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use the compound of formula (II) or (III) taught in Fukui et al to provide the material claimed in the copending application to close to pure black tone, and thereby provide a material as claimed.

9. Claims 1-14 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-2 of U.S. Patent No. 6,699,649 in view of Fukui et al (US 2002/0102502).

Fukui et al disclose the use of the compound within the scope of formula (2) to provide the tone of photothermographic material close to pure black tone. See page 1 [0010]; and page 38-41, claims 1-20., compound of formula (II), and formula (III). It would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use the compound of formula (II) or (III) taught in Fukui et al to provide the material claimed in the U.S. Patent No. 6,699,649 to provide the tone thereof close to pure black tone, and thereby provide a material as claimed.

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Conclusion

10. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thorl Chea whose telephone number is (571) 272-1328. The examiner can normally be reached on 9 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H Kelly can be reached on (571)272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tchea *tm*
December 9, 2004

Thorl Chea
Primary Examiner
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